or their fuel oil units, valves, or manifolds in the line between the settling tanks and the boilers.

- (e) Fire extinguishing systems shall be provided for internal combustion installations in accordance with the following:
- (1) If a fixed fire-extinguishing system is installed to protect an internal combustion propelling machinery installation, the system shall be of the carbon dioxide type.
- (2) On vessels of 1,000 gross tons and over on an international voyage, the construction or conversion of which is contracted for on or after May 26, 1965, a fixed carbon dioxide system shall be installed in all spaces containing internal combustion or gas turbine main propulsion machinery, auxiliaries with an aggregate power of 1,000 b. hp. or greater, or their fuel oil units, including purifiers, valves, and manifolds.
- (3) On vessels, the construction, conversion or automation of which is contracted for on or after July 1, 1968, the systems shall be in accordance with the following:
- (i) A fixed carbon dioxide system shall be installed in any space containing machinery using fuel having a flashpoint of less than  $1\bar{1}0^{\circ}$  F.
- (ii) On vessels of 1,000 gross tons and over, a fixed carbon dioxide system shall be installed in all spaces containing internal combustion or gas turbine main propulsion machinery, auxiliaries with an aggregate power of 1,000 b. hp. or greater, or their fuel oil units, including purifiers, valves, and manifolds.
- (f) On vessels contracted for on or after November 19, 1952, where an enclosed ventilating system is installed for electric propulsion motors or generators, a fixed carbon dioxide extinguishing system shall be installed in such system.

[CGFR 65-50, 30 FR 17001, Dec. 30, 1965, as amended by CGFR 66-33, 31 FR 15285, Dec. 6, 1966; CGFR 67-90, 33 FR 1016, Jan. 26, 1968; CGD 95-027, 61 FR 26006, May 23, 1996]

## §95.05-15 Hand portable fire extinguishers and semiportable fire extinguishing systems.

(a) Approved hand portable fire extinguishers and semiportable fire extinguishing systems shall be installed on all vessels, other than unmanned barges and fishing vessels, as set forth in subpart 95.50.

## Subpart 95.10—Fire Main System, **Details**

## §95.10-1 Application.

(a) The provisions of this subpart, with the exception of §95.10-90, shall apply to all fire main installations contracted for on or after May 26, 1965, Installations contracted for prior to May 26, 1965, shall meet the requirements of § 95.10-90.

## § 95.10-5 Fire pumps.

(a) Vessels shall be equipped with independently driven fire pumps in accordance with Table 95.10-5(a).

TABLE 95.10-5(a)

Gross tons		Min- imum	Hose and hy-	Nozzle	Length
Over	Not over	number of pumps	drant size, inches	orifice size, inches	of hose feet
	100	11	1 11/2	1 1/2	1 50
100	1,000	1	11/2	5/8	50
1,000	1,500	2	11/2	5/8	50
1,500		2	<sup>2</sup> 2½	27/8	<sup>2</sup> 50

¹On vessels of 65 feet in length or less, ¾-inch hose of good commercial grade together with a commercial garden hose nozzle may be used. The pump may be hand operated and the length of hose shall be sufficient to assure coverage of all parts of the vessel.

²75 feet of ¹½-inch hose and ‰-inch nozzle may be used where specified by § 95.10–10(b) for interior locations and 50 feet of ¹½-inch hose may be used in exterior locations on vessels in other than ocean or coastwise service.

- (b) On vessels of 1,000 gross tons and over on an international voyage, each required fire pump, while delivering water thru the fire main system at a pressure corresponding to that required by paragraph (c) of this section, shall have a minimum capacity of at least two-thirds of that required for an independent bilge pump. However, in no case shall the capacity of each fire pump be less than that otherwise required by this section.
- (c) Each pump shall be capable of delivering water simultaneously from the two highest outlets at a Pitot tube pressure of approximately 50 p.s.i. Where 1½-inch hose is permitted in lieu of 2½-inch hose by footnote 2 of Table 95.10-5(a), the pump capacity shall be determined on the same basis as if 21/2inch hose had been permitted. Where 34-inch hose is permitted by Table